

Amendments to the Claims:

This listing of claims will replace all prior listings of claims in the application.

Listing Of Claims:

Claim 1 (**currently amended**). A zoom lens in/from which a magnification changing optical unit for changing an overall focal length of said zoom lens can be inserted/removed, characterized in that a wobbling unit which can be ~~slightly~~ amplitude-driven in an optical axis direction to detect a best imaging position is placed closer to an image side than an insertion position of said magnification changing optical unit.

Claim 2 (**original**). A lens according to claim 1, wherein said zoom lens sequentially includes, from an object side, a first unit which is fixed in magnification changing operation and has a positive refractive power, a second unit which moves in the optical axis direction in magnification changing operation and has a negative refractive power, a third unit for correcting an image plane fluctuation accompanying magnification changing operation, and a fourth unit having a positive refractive power for imaging, and a magnification changing optical unit which changes the overall focal length of said zoom lens can be inserted/removed in/from said fourth unit.

Claim 3 (**currently amended**). A lens according to claim 2 13, wherein a light amount adjustment stop is placed closer to the object side than said fourth unit.

Claim 4 (**original**). A lens according to claim 3, wherein when said wobbling unit is placed in said fourth unit and amplitude-driven to make an amplitude halfwidth of a backfocus change amount become 1/2 a depth of focus,

$$|\alpha_1(S_1 - E_1)/f_{w1}| < 0.6$$

is satisfied, where α_1 is an angle of an off-axis principal ray incident on an object-side principal plane of said wobbling unit (without insertion of said magnification changing optical unit), S_1 is a distance to a stop viewed from the object-side principal plane of said wobbling unit (without insertion of said magnification changing optical unit), E_1 is a distance to an image pickup plane viewed from an image-side principal plane of said wobbling unit

(without insertion of said magnification changing optical unit), and fw1 is a focal length at a wide-angle end without insertion of said magnification changing optical unit.

Claim 5 (**currently amended**). A lens according to claim 3-~~or~~4, wherein when said wobbling unit is placed in said fourth unit amplitude-driven to make an amplitude halfwidth of a backfocus change amount become 1/2 a depth of focus,

$$|\alpha_2(S_2 - E_2)/fw_2| < 2.2$$

is satisfied, where α_2 is an angle of an off-axis principal ray incident on the object-side principal plane of said wobbling unit (with insertion of said magnification changing optical unit), S_2 is a distance to the stop viewed from the object-side principal plane of said wobbling unit (with insertion of said magnification changing optical unit), E_2 is a distance to the image pickup plane viewed from the image-side principal plane of said wobbling unit (with insertion of said magnification changing optical unit), and fw2 is a focal length at the wide-angle end with insertion of said magnification changing optical unit.

Claim 6 (**currently amended**). A lens according to ~~any one of claims 1 to 5~~ claim 13, wherein in said fourth unit,

$$-0.001 < \phi_{4b}/l_m < 0.0015$$

is satisfied, where ϕ_{4b} is a refractive power of a lens unit located immediately before said wobbling unit in said fourth unit, and l_m is an image size of an image pickup element.

Claim 7 (**currently amended**). A lens according to ~~any one of claims 1 to 6~~ claim 13, wherein said wobbling unit is placed closest to the image side in said fourth unit.

Claim 8 (**currently amended**). A lens according to ~~any one of claims 1 to 7~~ claim 13, wherein part of said fourth unit is retracted on the optical axis by inserting said magnification changing optical unit.

Claim 9 (**currently amended**). A lens according to ~~any one of claims 1 to 8~~ claim 13, wherein an optical system for macro photographing and flange-back adjustment is placed closer to the image side than said wobbling unit in said fourth unit, and said optical system can integrally move in macro photographing and flange-back adjustment.

Claim 10 (**currently amended**). A lens according to ~~any one of claims 1 to 9~~ claim 13, wherein an optical system for macro photographing and flange-back adjustment is placed closer to the image side than said wobbling unit in said fourth unit, and said optical system comprises a lens unit fixed in macro photographing and flange-back adjustment and a lens unit which can move in macro photographing and flange-back adjustment.

Claim 11 (**currently amended**). A lens according to ~~any one of claims 1 to 10~~ claim 13, wherein an amplitude halfwidth of the wobbling unit before/after insertion of said magnification changing optical unit is

$$\Delta x_2 = F \cdot \Delta x_1$$

where Δx_1 is an amplitude halfwidth of the wobbling unit before insertion of the magnification changing optical unit, Δx_2 is an amplitude halfwidth of the wobbling unit after insertion of the magnification changing optical unit, and F is a rate of change of F-number due to insertion/removal of the magnification changing optical unit.

Claim 12 (**original**). A photographing system comprising said zoom lens defined in any one of claims 1 to 10 and a camera on which said zoom lens is mounted.

Claim 13 (**new**). A zoom lens sequentially comprising, from an object side:

a first unit which is fixed in magnification changing operation and has a positive refractive power;

a second unit which moves in the optical axis direction in magnification changing operation and has a negative refractive power;

a third unit for correcting an image plane fluctuation accompanying magnification changing operation;

a fourth unit having a positive refractive power for imaging;

a magnification changing optical unit which changes the overall focal length of said zoom lens can be inserted/removed in/from said fourth unit; and

a wobbling unit which can be amplitude-driven in an optical axis direction to detect a best imaging position is placed closer to an image side than an insertion position of said magnification changing optical unit.

Claim 14 (new). A photographing system comprising said zoom lens defined in claim 13 and a camera on which said zoom lens is mounted.

Claim 15 (new). A lens according to claim 4, wherein when said wobbling unit is placed in said fourth unit amplitude-driven to make an amplitude halfwidth of a backfocus change amount become 1/2 a depth of focus,

$$|\alpha^2(S_2 - E_2)/f_{w2}| < 2.2$$

is satisfied, where α^2 is an angle of an off-axis principal ray incident on the object-side principal plane of said wobbling unit (with insertion of said magnification changing optical unit), S_2 is a distance to the stop viewed from the object-side principal plane of said wobbling unit (with insertion of said magnification changing optical unit), E_2 is a distance to the image pickup plane viewed from the image-side principal plane of said wobbling unit (with insertion of said magnification changing optical unit), and f_{w2} is a focal length at the wide-angle end with insertion of said magnification changing optical unit.